



SEQUENCE LISTING

<110> Astra BioSciences Corporation
Zucker, Charles
Mendlein, John
Sun, Yumei
Tsunoda, Susan
Sierralta, Jimena

<120> Compositions And Methods For Identifying Modulators and Transducisomes

<130> AURO1210-1

<140> 09/462,517

<141> 2000-05-18

<160> 16

<170> PatentIn version 3.0

<210> 1

<211> 674

<212> PRT

<213> Drosophila melanogaster

<400> 1

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Met Val Thr Leu Asp Lys Thr Gly Lys Lys Ser Phe Gly Ile Cys Ile
20 25 30

Val Arg Gly Glu Val Lys Asp Ser Pro Asn Thr Lys Thr Thr Gly Ile
35 40 45

Phe Ile Lys Gly Ile Val Pro Asp Ser Pro Ala His Leu Cys Gly Arg
50 55 60

Leu Lys Val Gly Asp Arg Ile Leu Ser Leu Asn Gly Lys Asp Val Arg
65 70 75 80

Asn Ser Thr Glu Gln Ala Val Ile Asp Leu Ile Lys Glu Ala Asp Phe
85 90 95

Lys Ile Glu Leu Glu Ile Gln Thr Phe Asp Lys Ser Asp Glu Gln Gln
100 105 110

Ala Lys Ser Asp Pro Arg Ser Asn Gly Tyr Met Gln Ala Lys Asn Lys
115 120 125

Phe Asn Gln Glu Gln Thr Thr Asn Asn Asn Ala Ser Gly Gly Gln Gly
130 135 140

Met Gly Gln Gly Gln Gly Gln Gly Gln Gly Met Ala Gly Met Asn Arg
145 150 155 160

Gln Gln Ser Met Gln Lys Arg Asn Thr Thr Phe Thr Ala Ser Met Arg
165 170 175

Gln Lys His Ser Asn Tyr Ala Asp Glu Asp Asp Glu Asp Thr Arg Asp
180 185 190

Met Thr Gly Arg Ile Arg Thr Glu Ala Gly Tyr Glu Ile Asp Arg Ala
195 200 205

Ser	Ala	Gly	Asn	Cys	Lys	Leu	Asn	Lys	Gln	Glu	Lys	Asp	Arg	Asp	Lys
210						215					220				
Glu	Gln	Glu	Asp	Glu	Phe	Gly	Tyr	Thr	Met	Ala	Lys	Ile	Asn	Lys	Arg
225					230					235					240
Tyr	Asn	Met	Met	Lys	Asp	Leu	Arg	Arg	Ile	Glu	Val	Gln	Arg	Asp	Ala
				245					250					255	
Ser	Lys	Pro	Leu	Gly	Leu	Ala	Leu	Ala	Gly	His	Lys	Asp	Arg	Gln	Lys
			260					265					270		
Met	Ala	Cys	Phe	Val	Ala	Gly	Val	Asp	Pro	Asn	Gly	Ala	Leu	Gly	Ser
		275					280					285			
Val	Asp	Ile	Lys	Pro	Gly	Asp	Glu	Ile	Val	Glu	Val	Asn	Gly	Asn	Val
	290					295					300				
Leu	Lys	Asn	Arg	Cys	His	Leu	Asn	Ala	Ser	Ala	Val	Phe	Lys	Asn	Val
305					310					315					320
Asp	Gly	Asp	Lys	Leu	Val	Met	Ile	Thr	Ser	Arg	Arg	Lys	Pro	Asn	Asp
				325					330					335	
Glu	Gly	Met	Cys	Val	Lys	Pro	Ile	Lys	Lys	Phe	Pro	Thr	Ala	Ser	Asp
			340					345					350		
Glu	Thr	Lys	Phe	Ile	Phe	Asp	Gln	Phe	Pro	Lys	Ala	Arg	Thr	Val	Gln
		355					360					365			
Val	Arg	Lys	Glu	Gly	Phe	Leu	Gly	Ile	Met	Val	Ile	Tyr	Gly	Lys	His
	370					375					380				
Ala	Glu	Val	Gly	Ser	Gly	Ile	Phe	Ile	Ser	Asp	Leu	Arg	Glu	Gly	Ser
385					390					395					400
Asn	Ala	Glu	Leu	Ala	Gly	Val	Lys	Val	Gly	Asp	Met	Leu	Leu	Ala	Val
				405					410					415	
Asn	Gln	Asp	Val	Thr	Leu	Glu	Ser	Asn	Tyr	Asp	Asp	Ala	Thr	Gly	Leu
			420					425					430		
Leu	Lys	Arg	Ala	Glu	Gly	Val	Val	Thr	Met	Ile	Leu	Leu	Thr	Leu	Lys
		435					440					445			
Ser	Glu	Glu	Ala	Ile	Lys	Ala	Glu	Lys	Ala	Ala	Glu	Glu	Lys	Lys	Lys
	450					455					460				
Glu	Glu	Ala	Lys	Lys	Glu	Glu	Glu	Lys	Pro	Gln	Glu	Pro	Ala	Thr	Ala
465					470					475					480
Glu	Ile	Lys	Pro	Asn	Lys	Lys	Ile	Leu	Ile	Glu	Leu	Lys	Val	Glu	Lys
				485					490					495	
Lys	Pro	Met	Gly	Cys	His	Arg	Leu	Arg	Arg	Gln	Lys	Gln	Pro	Cys	His
			500					505					510		
Asp	Trp	Leu	Cys	Asn	His	Pro	Arg	Leu	Ser	Gly	Gly	Gln	Val	Ala	Ala
		515					520					525			
Asp	Lys	Arg	Leu	Lys	Ile	Phe	Asp	His	Ile	Cys	Asp	Ile	Asn	Gly	Thr
	530					535					540				
Pro	Ile	His	Val	Gly	Ser	Met	Thr	Thr	Leu	Lys	Val	His	Gln	Leu	Ph

545		550		555		560
His Thr Thr Tyr	Glu Lys Ala Val Thr	Leu Thr Val Phe Arg Ala Asp				
	565	570			575	
Pro Pro Glu Leu Glu Lys Phe Asn Val Asp Leu Met Lys Lys Ala Gly						
	580	585			590	
Lys Glu Leu Gly Leu Ser Leu Ser Pro Asn Glu Ile Gly Cys Thr Ile						
	595	600			605	
Ala Asp Leu Ile Gln Gly Gln Tyr Pro Glu Ile Asp Ser Lys Leu Gln						
	610	615			620	
Arg Gly Asp Ile Ile Thr Lys Phe Asn Gly Asp Ala Leu Glu Gly Leu						
	625	630			635	640
Pro Phe Gln Val Cys Tyr Ala Leu Phe Lys Gly Ala Asn Gly Lys Val						
	645	650			655	
Ser Met Glu Val Thr Arg Pro Lys Pro Thr Leu Arg Thr Glu Ala Pro						
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Lys Ala

<210> 2
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 <213> Drosophila melanogaster

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aacggcaatg tgcttaagaa tcgctgccac ttgaacgcct ccgccgtgtt caagagcgtg	960
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gtcaagccca tcaaaaagtt cccaccgcg tctgatgaga ctaagtttat cttcgaccag 1080
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<210> 3
<211> 93
<212> PRT
<213> artificial

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<220>
<223> PSD-1

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<400> 3

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Met Glu Tyr Glu Glu Ile Thr Leu Glu Arg Gly Asn Ser Gly Leu Gly
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Phe Ser Ile Ala Gly Gly Thr Asp Asn Pro His Ile Gly Asp Asp Pro
20        25        30
Ser Ile Phe Ile Thr Lys Ile Ile Pro Gly Gly Ala Ala Ala Gln Asp
35        40        45
Gly Arg Leu Arg Val Asn Asp Ser Ile Leu Phe Val Asn Glu Val Asp
50        55        60
Val Arg Glu Val Thr His Ser Ala Ala Val Glu Ala Leu Lys Glu Ala
65        70        75        80
Gly Ser Ile Val Arg Leu Tyr Val Met Arg Arg Lys Pro
85          90

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<210> 4
<211> 93
<212> PRT
<213> Artificial

<220>
<223> PSD95-2

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Glu	Lys	Val	Met	Glu	Ile	Lys	Leu	Ile	Lys	Gly	Pro	Lys	Gly	Leu	Gly
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Phe	Ser	Ile	Ala	Gly	Gly	Val	Gly	Asn	Gln	His	Ile	Pro	Gly	Asp	Asn
			20					25					30		
Ser	Ile	Tyr	Val	Thr	Lys	Ile	Ile	Glu	Gly	Gly	Ala	Ala	His	Lys	Asp
		35					40					45			
Gly	Arg	Leu	Gln	Ile	Gly	Asp	Lys	Ile	Leu	Ala	Val	Asn	Ser	Val	Gly
	50					55					60				
Leu	Glu	Asp	Val	Met	His	Glu	Asp	Ala	Val	Ala	Ala	Leu	Lys	Asn	Thr
65					70					75					80
Tyr	Asp	Val	Val	Tyr	Leu	Lys	Val	Ala	Lys	Pro	Ser	Asn			
				85					90						

<210> 5
<211> 87
<212> PRT
<213> artificial

<220>
<223> PSD95-3

<400> 5

Arg	Glu	Pro	Arg	Arg	Ile	Val	Ile	His	Arg	Gly	Ser	Thr	Gly	Leu	Gly
1				5					10					15	
Phe	Asn	Ile	Val	Gly	Gly	Glu	Asp	Gly	Glu	Gly	Ile	Phe	Ile	Ser	Phe
			20					25					30		
Ile	Leu	Ala	Gly	Gly	Pro	Ala	Asp	Leu	Ser	Gly	Glu	Leu	Arg	Lys	Gly
		35					40					45			
Asp	Gln	Ile	Leu	Ser	Val	Asn	Gly	Val	Asp	Leu	Arg	Asn	Ala	Ser	His
	50					55				60					
Glu	Gln	Ala	Ala	Ile	Ala	Leu	Lys	Asn	Ala	Gly	Gln	Thr	Val	Thr	Ile
65					70					75					80
Ile	Ala	Gln	Tyr	Lys	Pro	Glu									
				85											

<210> 6
<211> 87
<212> PRT
<213> artificial

<220>
<223> dlg-3

<400> 6

Arg Glu Pro Arg Thr Ile Thr Ile Gln Lys Gly Pro Gln Gly Leu Gly
1 5 10 15
Phe Asn Ile Val Gly Gly Glu Asp Gly Gln Gly Ile Tyr Val Ser Phe
20 25 30
Ile Leu Ala Gly Gly Pro Ala Asp Leu Gly Ser Glu Leu Lys Arg Gly
35 40 45
Asp Gln Leu Leu Ser Val Asn Asn Val Asn Leu Thr His Ala Thr His
50 55 60
Glu Glu Ala Ala Gln Ala Leu Lys Thr Ser Gly Gly Val Val Thr Leu
65 70 75 80
Leu Ala Gln Tyr Arg Pro Glu
85

<210> 7

<211> 88

<212> PRT

<213> artificial

<220>

<223> nNOS

<400> 7

Pro Asn Val Ile Ser Val Arg Leu Phe Lys Arg Lys Val Gly Gly Leu
1 5 10 15
Gly Phe Leu Val Lys Glu Arg Val Ser Lys Pro Pro Val Ile Ile Ser
20 25 30
Asp Leu Ile Arg Gly Gly Ala Ala Glu Gln Ser Gly Leu Ile Gln Ala
35 40 45
Gly Asp Ile Ile Leu Ala Val Asn Asp Arg Pro Leu Val Asp Leu Ser
50 55 60
Tyr Asp Ser Ala Leu Glu Val Leu Arg Gly Ile Ala Ser Glu Thr His
65 70 75 80
Val Val Leu Ile Leu Arg Gly Pro
85

<210> 8

<211> 88

<212> PRT

<213> artificial

<220>

<223> inaD-3

<400> 8

Pro Lys Ala Arg Thr Val Gln Val Arg Lys Glu Gly Phe Leu Gly Ile
1 5 10 15
Met Val Ile Tyr Gly Lys His Ala Glu Val Gly Ser Gly Ile Phe Ile
20 25 30
Ser Asp Leu Arg Glu Gly Ser Asn Ala Glu Leu Ala Gly Val Lys Val

35

40

45

Gly Asp Met Leu Leu Ala Val Asn Gln Asp Val Thr Leu Glu Ser Asn
 50 55 60

Tyr Asp Asp Ala Thr Gly Leu Leu Lys Arg Ala Glu Gly Val Val Thr
 65 70 75 80

Met Ile Leu Leu Thr Leu Lys Ser
 85

<210> 9
 <211> 95
 <212> PRT
 <213> artificial

<220>
 <223> inaD-1

<400> 9

Glu Leu Ile His Met Val Thr Leu Asp Lys Thr Gly Lys Lys Ser Phe
 1 5 10 15

Gly Ile Cys Ile Val Arg Gly Glu Val Lys Asp Ser Pro Asn Thr Lys
 20 25 30

Thr Thr Gly Ile Phe Ile Lys Gly Ile Val Pro Asp Ser Pro Ala His
 35 40 45

Leu Cys Gly Arg Leu Lys Val Gly Asp Arg Ile Leu Ser Leu Asn Gly
 50 55 60

Lys Asp Val Arg Asn Ser Thr Glu Gln Ala Val Ile Asp Leu Ile Lys
 65 70 75 80

Glu Ala Asp Phe Lys Ile Glu Leu Glu Ile Gln Thr Phe Asp Lys
 85 90 95

<210> 10
 <211> 86
 <212> PRT
 <213> artificial

<220>
 <223> inaD-5

<400> 10

Leu Glu Lys Phe Asn Val Asp Leu Met Lys Lys Ala Gly Lys Glu Leu
 1 5 10 15

Gly Leu Ser Leu Ser Pro Asn Glu Ile Gly Cys Thr Ile Ala Asp Leu
 20 25 30

Ile Gln Gly Gln Tyr Pro Glu Ile Asp Ser Lys Leu Gln Arg Gly Asp
 35 40 45

Ile Ile Thr Lys Phe Asn Gly Asp Ala Leu Glu Gly Leu Pro Phe Gln
 50 55 60

Val Cys Tyr Ala Leu Phe Lys Gly Ala Asn Gly Lys Val Ser Met Glu
 65 70 75 80

Val Thr Arg Pro Lys Pro

<210> 11
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 <212> PRT
 <213> artificial

<220>
 <223> inaD-2

<400> 11

Lys Asp Leu Arg Arg Ile Glu Val Gln Arg Asp Ala Ser Lys Pro Leu
 1 5 10 15
 Gly Leu Ala Leu Ala Gly His Lys Asp Arg Gln Lys Met Ala Cys Phe
 20 25 30
 Val Ala Gly Val Asp Pro Asn Gly Ala Leu Gly Ser Val Asp Ile Lys
 35 40 45
 Pro Gly Asp Glu Ile Val Glu Val Asn Gly Asn Val Leu Lys Asn Arg
 50 55 60
 Cys His Leu Asn Ala Ser Ala Val Phe Lys Ser Val Asp Gly Asp Lys
 65 70 75 80
 Leu Val Met Ile Thr Ser Arg Arg Lys
 85

<210> 12
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 <212> PRT
 <213> artificial

<220>
 <223> inaD-4

<400> 12

Pro Met Gly Val Ile Val Cys Gly Gly Lys Asn Asn His Val Thr Thr
 1 5 10 15
 Gly Cys Val Ile Thr His Val Tyr Pro Glu Gly Gln Val Ala Ala Asp
 20 25 30
 Lys Arg Leu Lys Ile Phe Asp His Ile Cys Asp Ile Asn Gly Thr Pro
 35 40 45
 Ile His Val Gly Ser Met Thr Thr Leu Lys Val His Gln Leu Phe His
 50 55 60
 Thr Thr Tyr Glu Lys Ala Val Thr Leu Thr Val Phe Arg Ala Asp Pro
 65 70 75 80

<210> 13
 <211> 5
 <212> PRT
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<220>
 <223> import localizaton sequence targeting nucleus

<400> 13

Lys Lys Lys Arg Lys
1 5

<210> 14
<211> 26
<212> PRT
<213> artificial

<220>
<223> import localization sequence targeting mitochondrion

<400> 14

Met Leu Arg Thr Ser Ser Leu Phe Thr Arg Arg Val Gln Pro Ser Leu
1 5 10 15

Phe Arg Asn Ile Leu Arg Leu Gln Ser Thr
20 25

<210> 15
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<212> PRT
<213> artificial

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<223> import localization sequence targeting endoplasmic reticulum

<400> 15

Lys Asp Glu Leu
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<210> 16
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<223> insertion into plasma membrane

<220>
<221> VARIANT
<222> (1)..(4)
<223> x = any amino acid

<400> 16

Cys Cys Xaa Xaa
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